Overview of the Power Plant Apprentice Program in the Walla Walla District, USACE

Crafts available:

Electrical
Mechanical
Operations

Training site:

McNary Lock and Dam
Umatilla, Oregon
(541) 922-2224

Points of Contact: Terry Filson or Pete McGuckin
Website: www.nww.usace.army.mil

Overview of the program:

Our apprenticeship is a self-paced program that is based on a correspondence-course type of curriculum that is augmented by other methods of instruction. The program is divided into 8 phases. Each phase lasts approximately 4 months, and contains specific hydropower systems research and academic courses that must completed during that phase. On-the-Job Training (OJT) comprises well over 50% of the program's training plan. There are individual progressive tests and a semi-formal OJT training evaluation on a regular basis, as well as a comprehensive exam (containing written, practical and oral segments) at the end of each phase. Upon graduation, the apprentice will be placed in a journeyman position at one of the district's six hydro projects.

Other Activities:

We make trips to other dams, power generating projects and distribution sites to help the apprentice build networks and to broaden their understanding of hydropower issues, electrical generation in general, and distribution interfaces. Other forms of instruction have been integrated into the program, including: CBT, hands-on lab training, partnering with Community Colleges, and contract instruction. And did we mention OJT??

Work Schedule:

Monday through Thursday, 0630 – 1700.
Once in phase 3, Operators are on a 12-hour rotating shift (6-6).

As the years go by…

Phase 1 (CoOp Summer #1)

Academic: The focus of the first phase is to expose the trainees to all the aspects of maintenance and operation of a hydro-electric power generating station. *Principles of HydroPower* and *HydroElectric Power Plant Operations* are 2 courses that are used to provide an in-depth overview of how systems in the hydroelectric power generation industry work. Also during this time, nearly all of the safety training requirements for our type of work setting is completed.

OJT: Trainees work in **all** shops (2 days per week) in the first year, not only for indoctrination, but primarily to better understand the interaction between work centers.

Phase 2 (CoOp Summer #2)

Academic: We continue to develop the "big picture" in phase 2. The *Principles of HydroPower* course is completed. Trainees begin to work on the basic correspondence course portion of the program, called TPCs. They also prepare and give presentations on hydropower systems and visit nearby hydro-projects.

OJT: Continue shop rotation (2 days per week). Trainees select their craft at the end of this phase.

Phases 3-5 (approx)

Academic: Now the apprentices start to focus on their selected craft. They continue the correspondence courses and some off-site training may be arranged. Study time (either academic study or systems research) is reduced to 1 day per week. For the remainder of the program, an apprentice works 3 days a week in their assigned shop.

OJT: Establish the apprentice's craft assignment. Introduce the Qualification Card (OJT tracking) component of the program. Temporary assignments to other hydro-projects are possible in phase 5.

Phases 6-8 (approx)

Academic: The apprentice completes the correspondence course in their selected craft area, studying one day per week. More off-site, specialized training is possible.

OJT: Apprentices complete their in-craft assignments and use of Qualification Cards. More independent work is assigned. The final upriver assignment may be made during last 6 months in the program.

Graduate